

# 10th Class 2018

Physics	Group-I	Paper-II
Time: 15 Minutes	(Objective Type)	Max. Marks: 12

**Note:** Four possible answers A, B, C and D to each question are given. The choice which you think is correct, fill that circle in front of that question with Marker or Pen ink in the answer-book. Cutting or filling two or more circles will result in zero mark in that question.

1-1- **The relation between  $v$ ,  $f$  and  $\lambda$  of a wave is:**

- (a)  $v f = \lambda$  (b)  $f \lambda = v$  ✓  
(c)  $v = \frac{\lambda}{f}$  (d)  $v \lambda = f$

2- **Which is an example of a longitudinal wave:**

- (a) Sound wave ✓ (b) Light wave  
(c) Radio wave (d) Water wave

3- **Index of refraction of diamond is:**

- (a) 1.52 (b) 1.66  
(c) 2.21 (d) 2.42 ✓

4- **Speed of light in water is:**

- (a)  $3 \times 10^8 \text{ ms}^{-1}$  (b)  $2.3 \times 10^8 \text{ ms}^{-1}$  ✓  
(c)  $2 \times 10^8 \text{ ms}^{-1}$  (d)  $1 \times 10^8 \text{ ms}^{-1}$

5- **S.I unit of charge is:**

- (a) Kg (b) Newton  
(c) Volt (d) Coulomb ✓

6- **One volt is equal to:**

- (a) 1 JC (b)  $1 \text{ JC}^{-1}$  ✓  
(c)  $1 \text{ J/C}^2$  (d)  $1 \text{ NC}^{-1}$

7- **When we double the voltage in a simple electric circuit, we double the:**

- (a) Current ✓ (b) Power  
(c) Resistance (d) Both a & b ✓



- 8- **Mathematical form of Ohm's Law is:**  
(a)  $P = IV$  (b)  $V = IR$  ✓  
(c)  $Q = It$  (d)  $W = Q / V$
- 9- **A device which converts electrical energy into mechanical energy is called:**  
(a) D.C. motor ✓ (b) Generator  
(c) Transformer (d) All of these
- 10- **The process by which electrons are emitted by a hot metal surface is known as:**  
(a) Boiling (b) Evaporation  
(c) Conduction (d) Thermionic emission ✓
- 11- **What does the term e-mail stand for:**  
(a) Emergency mail (b) Electronic mail ✓  
(c) Extra mail (d) External mail
- 12- **One isotope of uranium is  ${}_{92}^{238}\text{U}$ . The number of neutrons in this isotope is:**  
(a) 92 (b) 238  
(c) 146 ✓ (d) 330